PRELIMINARY REPORT

PRELIMINARY REPORT OF THE TASK FORCE ON PUBLIC POLICY PRINCIPLES IN PENSION PLAN FUNDING

JANUARY 2004

© 2004 Canadian Institute of Actuaries

Document 204003

Ce document est disponible en français

Canadian Institute of Actuaries • Institut Canadien des Actuaires

MEMORANDUM

TO: All Fellows, Associates and Correspondents of the Canadien Institute of Actuaries

FROM: David Brown, Chairperson of the Task Force on Public Policy Principles for Pension Plan Funding

DATE: January 26, 2004

SUBJECT : Preliminary Report of the Task Force on Public Policy Principles in Pension Plan Funding

---

Our task force has now developed certain proposals for the revision of the Institute's Pension Related Standards. These are described in the attached paper, along with some background material explaining our reasons for making these proposals.

During the spring and summer of 2003, we obtained a lot of input from members of the Institute and from non-member pension stakeholders about these matters, and the attached paper reflects much of that input. We will be conducting another round of consultative meetings seeking further input over the next two months. Specifically, we have scheduled Town Hall meetings to discuss the paper in the following cities on the indicated dates.

Vancouver – February 9

Toronto – February 16

Montréal – February 26

Québec – February 27

Calgary – March 17

Details of the times and locations of each of these meetings will be sent to members in each area very shortly. If you are unable to attend any of these meetings, the Task Force would welcome your written submission **before March 31, 2004,** addressed to me at my Yearbook address.

We are also arranging meetings with representative groups of employers, labour unions and regulators.

After completing these consultations, we will be submitting to the Board of the Institute our final report, prior to the Annual General Meeting.

DB

INTRODUCTION

In November 2002, the Board of the Canadian Institute of Actuaries (CIA) appointed the Task Force on Public Policy Principles of Pension Plan Funding with the following mandate:

> *Making use of the Report of the Task Force on Pension Plan Funding and the Report of the Task Force on Multi-Employer Pension Plans as reference points, and through discussion within the profession and with external stakeholders – plan sponsors, employee groups and regulators – recommend to the CIA Board for its November 2003 meeting what the actuary's reporting and certification of pension funding should convey to our publics and, therefore, what should be the standard for accepted actuarial practice in that regard.*

The appointment of our task force occurred at a time when public debate in Canada and elsewhere about the funding of defined benefit pension plans has intensified. An extended period of disappointing investment performance is generally considered to be the principal source of these funding concerns but the important role played by actuaries in the funding process lends urgency to the need to review our professional standards in this area. These standards have changed relatively little since they were introduced in 1981, and have recently been under attack by articulate critics in the media and in the profession itself. Appendix A summarizes the changes in the pension standards of practice and in the environment over the last 20 years that have affected the funding process.

Given the original mandate of our task force and this broad public concern about funding issues, we believe that a comprehensive review of our professional standards in this area from first principles is very timely and that is what we are attempting.

There are two alternative schools of thought within the CIA about the role of the actuary in the valuation process for pension plans. Under one approach, the actuarial profession prescribes one or more funding objectives as part of its standards of practice and elaborates the details of how those objectives should be measured and reported. The role of regulators in prescribing minimum and maximum objectives is acknowledged but is not considered to diminish the need for objectives prescribed by the actuarial profession.

The other school of thought is that the Plan Sponsor[1] should develop its own funding objectives to suit the pension "deal" for that particular plan as well as its own risk management philosophy, while also recognizing that pension and tax legislation impose minimum and maximum limits. Professional standards would then stipulate how to measure and report particular funding objectives. This school of thought recognizes that the setting of minimum and maximum limits is the province of legislators and regulators, not something to be prescribed by the actuarial profession.

[1] The term "Plan Sponsor" is used in this report to describe the entity that is responsible for funding policy for a particular pension plan, as distinct from the entity that establishes the plan and/or has fiduciary responsibilities for its administration. In most single-employer plans, the Plan Sponsor will be the employer in its role as financial guarantor of the plan, rather than as the "Administrator" as defined in the pension legislation of common-law jurisdictions. The employer is often the Administrator as well, but that is a fiduciary role and is unrelated to the responsibility for funding policy. The Plan Sponsor (for our purposes) of a jointly trusteed or multi-employer pension plan is usually the board of trustees of the plan.

Our task force subscribes to the second school of thought, with the provisos that:

- the actuary would ensure that the Plan Sponsor makes a fully informed choice of funding policy and that it does meet the Plan Sponsor's broader objectives.
- regardless of the funding policy chosen, the actuary's report would always include the measurement of the plan's current status on a plan termination basis.

The recommendations of our task force are intended to apply both to plans that are registered under pension benefits and income tax legislation and those that are not, even though non-registered plans are generally unregulated as to either any minimum or maximum funding objectives. In particular, we believe the actuary's report on a non-registered plan should include a measurement of the plan's liabilities on a plan termination basis.

PRELIMINARY RECOMMENDATIONS

After considering the input from our consultations with pension stakeholders and our own research to date, the task force has the following preliminary recommendations (in bold text) and expositions thereof (in plain text).

1. **A report on pension funding performed in accordance with accepted actuarial practice should reflect the funding objectives agreed upon jointly by the Plan Sponsor and the actuary.**

   Pension plans have varying needs and circumstances. Plan Sponsors are in the best position to establish the funding objectives of the plan to reflect those needs and circumstances. These objectives will generally be constrained by regulation and the actuary should be satisfied that the objectives are consistent with regulatory requirements and that the Plan Sponsor correctly understands the long-term implications of the funding policy. However, the Plan Sponsor remains ultimately responsible for establishing the funding objectives and the actuary would not usurp this role.

2. **Accepted actuarial practice should stipulate how certain key funding objectives are measured and reported.**

   In theory, pension funding objectives could range widely. In practice, certain key funding objectives are likely to be considered or adopted by many Plan Sponsors. For these key funding objectives, accepted actuarial practice would stipulate measurement and reporting standards. This will ensure that Plan Sponsors receive consistent, high-quality information, as do plan members when they have access to that information.

   For other likely objectives, accepted actuarial practice would be guided by:

   - binding guidance provided by the general standards;
   - non-binding guidance provided through educational notes, since it may be inadvisable or impractical to constrain actuarial practice to a narrower range with respect to these other objectives.

   The task force recommends that accepted actuarial practice stipulate measurement and reporting standards for the following "key funding objectives." For the first objective in this list, such stipulation would apply to all plans. For the others on the list, the stipulation would apply for these plans where the objective indicated is one of those specified by the Plan Sponsor in the funding policy for the plan.

- *Security of accrued benefits on a plan termination basis:* The focus here would be on measuring and reporting the security of all vested benefits that would be payable upon plan termination. The measurement basis would be that of a wind-up valuation, including all vested benefits that would be triggered upon plan termination. A variant of this objective would involve measuring and reporting the impact of employer termination (e.g., giving rise to additional "plant closure benefits" and additional plan wind-up expenses). The standards would provide guidance on appropriate provisions for adverse deviations (PfADs) where a plan's assets and liabilities are mismatched or where other specified risks are present.[2] In any event, the minimum funding objective should not be lower than any regulatory minimum applicable to the plan.
- *Equity among cohorts of contributors (plan members and/or employers and/or shareholders):* The Plan Sponsor would define a "cohort of contributors" (i.e., decide the time period over which equity is to be achieved). The actuary would then select, in consultation with the Plan Sponsor, an actuarial basis that aims to achieve an appropriate degree of equity between cohorts. The actuarial basis would reflect projected earnings in the case of a final average earnings-related plan.
- *Stability of required contributions (by plan members and/or employers and/or shareholders):* The focus here would be on ensuring that required contributions are not unmanageably volatile (e.g., dramatic year-over-year changes, or rising gradually to unmanageable levels). As with the previous objective, the actuarial basis would reflect projected earnings in the case of a final average earnings-related plan.
- *Matching of the plan's assets and liabilities when measured on the Plan Sponsor(s)' financial reporting basis:* The increasing scrutiny on corporate financial reporting is already causing some Plan Sponsors to seek such matching (e.g., in order to avoid disclosure of a pension deficit when measured on a financial reporting basis). The actuarial basis to be used in such circumstances would clearly be driven by the financial reporting basis chosen by the Plan Sponsor.
- *Maximization of permitted funding:* Strictly speaking, the establishment of maximum funding limits is a matter for public policy, not actuarial standards. However, considerable trust is reposed in actuaries under Canadian tax law and we must continue to merit that trust. Therefore, it will be helpful if accepted actuarial practice helps delimit funding. This will also be helpful in situations where Plan Sponsors want to know, other than for tax reasons, when funding has become excessive. It is anticipated that a reasonable upper limit would be defined by the combination of:
  - any appropriate actuarial cost method permitted under accepted actuarial practice
  - conservative, but still plausible, actuarial assumptions
  - conservative, but still plausible, future plan improvements (e.g., ad hoc indexing increases, career average updates).

  Although more work is needed on this topic, "plausible" actuarial assumptions might be assessed with the help of a forecasting model (e.g., include margins which, in aggregate, are such that it is expected that the margin will be sufficient in 90% of the possible future scenarios over a specified time horizon[3]). "Plausible" future plan improvements might be assessed by reference to historical practice (e.g., neither capped at the past pattern, nor wildly at variance from it either).

---

[2] See Recommendation 4 for further comment on guidance for PfADs.

[3] The task force specifically invites comments regarding the maximum margin for adverse deviations that might be included without violating the recommended principle that the assumptions be "plausible."

Other potential funding objectives for which educational notes would provide non-binding guidance could pertain to:

- Flexibility in contributions
- Tax-effectiveness or tax planning
- Cash flow management of the pension fund.

3. **Accepted actuarial practice should continue to require, if practical, the measurement and reporting of the hypothetical wind-up position of the plan.**

Even when security of accrued benefits is not a chosen funding objective, Plan Sponsors and plan members benefit from knowing the hypothetical wind-up position of the plan. (This also minimizes the risk to the actuary if the plan is later wound up in a deficit position.) The reported position would reflect the wind-up scenario which produces the highest liabilities (typically, plan termination precipitated by employer termination). Again, the standards would provide guidance on PfADs.

In some situations, it may not be practical (e.g., for a legislated plan that does not specify wind-up benefits) or useful (e.g., for a "designated plan" under the Income Tax Act) to measure or report the hypothetical wind-up position of the plan. In these cases, the actuary would report the reason for the impracticality or inutility.

4. **The amount of any provision for adverse deviation (PfAD) should depend on the considerations set forth in SOP 1740[4], as well as on the risk management philosophy of the Plan Sponsor. The actuary should report both the amount of the PfAD and the related risk management philosophy of the Plan Sponsor.**

The actuary cannot determine unilaterally the size of any PfAD. This is because the Plan Sponsor is charged with managing plan funding risks. For example, they may determine that the plan should be funded on a best-estimate basis and may establish a mechanism for addressing gains and losses that they consider appropriate. Alternatively, they may determine that the plan should be funded and managed conservatively so that losses become highly improbable (although a mechanism for dealing with gains and losses would still be needed).

---

[4] These considerations are that the PfADs should:

- strike a balance among the conflicting interests of those affected by the calculation
- take account of the possibility to offset the effect of adverse deviations by means other than a provision
- take account of the effect of the uncertainty of the assumptions and data
- not [normally] take account of the possibility of catastrophe or other major adverse deviation
- [address] uncertainty of assumptions [by] selection of assumptions which are more conservative than best estimate assumptions.

There are at least two additional factors that may influence the risk management philosophy of the Plan Sponsor and, ultimately, the amount of the PfAD:

- The Ontario government operates a Pension Benefit Guarantee Fund that insures (within limits and through the payment of risk-based assessments) the pension benefits earned by the members of most defined benefit plans who are employed in Ontario. The Plan Sponsor may feel that a plan which has such a backstop can operate with a smaller PfAD. Alternatively, they may prefer to operate with a larger PfAD in order to avoid larger risk-based assessments.
- The legal framework governing pension plans and pension plan trusts has become increasingly adverse for Plan Sponsors. Sponsor actions to withdraw surplus, to take contribution holidays or even to make benefit improvements have been challenged by plan members. In such an environment the Plan Sponsor may be reluctant to establish a risk management philosophy that increases the likelihood of an inaccessible surplus. Yet, by definition, a PfAD is expected to be superfluous and to eventually give rise to a surplus. (This question is addressed further at the end of this paper.)

In both cases (and there are many others), the actuary would consult with the plan sponsor in establishing the appropriate PfAD[5]. Regardless of the circumstances, the actuary would report the amount of the PfAD in dollars and the risk management philosophy that underpins it. The actuary would also discuss in the report the uncertainty and risk that the PfAD is intended to mitigate, perhaps discussing the latter in probabilistic terms.

The Plan Sponsor would explicitly articulate the risk management philosophy. The actuary might assist in this articulation by inferring the philosophy implied by the historical management of the plan, but would not usurp the Plan Sponsor's role of managing plan risk.

5. **Whether or not the actuary should anticipate the risk premium associated with the plan's investment policy will depend upon the funding objectives and risk management philosophy adopted by the Plan Sponsor.**

Some Plan Sponsors will adopt funding objectives and a risk management philosophy that calls for the plan to be funded in anticipation of the risk premium associated with the plan's investment policy. If this is the case, the actuary would reflect the anticipated risk premium in the actuarial assumptions (subject to recommendation #4 regarding the establishment and reporting of the PfAD).

If anticipation of the risk premium is not called for, the actuary would establish the liability discount rate based on the rates of return achievable on the asset portfolio that best matches the liabilities[6] (typically, a bond-oriented portfolio, with expected rates of return equal to the expected yield net of expected defaults). This portfolio is referred to hereafter as the "risk-minimizing portfolio" (we have not used the common term "risk-free portfolio", since many pension plan liabilities cannot be perfectly matched).

Note that the identification of the risk-minimizing portfolio requires that the target liabilities be identified (e.g., plan termination versus going concern). This would be done by reference to the funding objectives established by the Plan Sponsor. If the Plan Sponsor has established multiple objectives, there may be no unique risk-minimizing portfolio. In this case, the actuary would reflect the risk-minimizing portfolio appropriate to the liability measure outlined in recommendation #3.

---

[5] The task force specifically invites comment on the practicality of the "insurance approach" to establishing an appropriate PfAD via a series of margins for adverse deviation (MfADs) in key actuarial assumptions.

For each key assumption, the Insurance Standard of Practice (SOP) stipulates that the starting point is a "best estimate" assumption, e.g., established by reference to the insurer's actual experience if credible, or by reference to industry experience if the insurer experience is not credible. From there, the Insurer SOP further prescribe both of the following:

- a "high" MfAD, which would be appropriate for a "high risk" situation
- a "low" MfAD, which would be appropriate for a "low risk" situation.

Situations of "high risk" and "low risk" are also defined (e.g., an assumption which is critical, but for which no credible data is available, might be a "high risk" situation). Most insurers are expected to be intermediate between "high risk" and "low risk." Therefore, the actuary's judgment is focused on two issues:

- What is the appropriate "best estimate" starting point?
- What is the appropriate intermediate MfAD between the "high risk" and "low risk" prescriptions? Unlike insurance companies, pension plans have no counterpart to the insurance Company's surplus. The choice of MfADs for an insurance valuation is only part of the risk management process, the other part being the stipulation of the MCCSR. This second part is not present for pension plans.

[6] This approach is consistent with the tenets of "financial economics," which call for the measurement of liabilities based on such considerations.

If the risk premium is anticipated by the actuary, s/he would also, when practical and useful:

- report the liabilities measured based on the rates of return implicit in the risk-minimizing portfolio;
- report the degree of mismatch between the plan's actual investment policy and the risk-minimizing portfolio; and
- report the resultant mismatch risk.

However, in particular, this idealized disclosure may not be practical for small pension plans.

6. **The actuary should report the required contributions to the plan that are consistent with the funding objectives and funding policy adopted by the Plan Sponsor.**

   The Plan Sponsor is responsible for determining the pace of funding relative to the established funding objectives (subject to any regulatory constraints). Thus, the Plan Sponsor would explicitly articulate the funding policy. The actuary might assist in this articulation by inferring the policy implied by the historical management of the plan, but would not usurp the Plan Sponsor's role of managing plan funding.

CHANGES IN STANDARDS OF PRACTICE

The implementation of the above recommendations would, we expect, take the form of some revisions in the Practice–Specific Standards for Pension Plans. It is not part of our mandate to develop language for those revisions but it may be helpful to those who will have that responsibility if we include in this report some suggestions.

It seems to us that it would be preferable not to tamper with the form of the actuary's opinion, which has been developed with considerable care and which should ideally be kept as simple as possible. The logical place for some of the revisions in the Standards is, we think, in Standard of Practice Section 3600.03, which is the section that specifies what should be included in the actuary's report if the report gives advice on funding. If the substance of our recommendations is accepted, we think that section would include at least the following items that should figure prominently in such reports.

1. The report should include a description of the plan's funding policy and objectives.
2. The report should indicate that its purpose is to determine, in accordance with accepted actuarial practice, the required contributions to the plan over the period from the "calculation date" to the "next calculation date" in order to make the intended progress toward the stated funding objective(s) of the plan.
3. The report should disclose the amount of the plan's assets and liabilities if it were wound up on the "calculation date." [The existing standard requires only disclosure of whether or not there would be a deficit on wind-up and the amount, if any, of the deficit.]

One other matter that we think should be pursued is the idea that the actuary's report should include her/his commentary on the impact on the plan's future funding of both experience developments that the actuary considers possible or probable, and also the likely pattern of future contribution requirements arising from the nature of the actuarial cost method or the asset valuation method. This idea needs to be developed in more detail and could perhaps be better dealt with by the Institute in the form of an educational note rather than by trying to describe it in detail in the standards themselves. However, since educational notes are typically elaborations of some aspect of the standards, there needs to be reference in the standards to a requirement for such commentary.

The task force believes that the foregoing recommendations provide a general "road map" for the revision of the Institute's Practice-Specific Standards for Pension Plans in the context of the present environment. However, there is an important area of legislative/legal uncertainty in that environment with respect to the ownership of funding surpluses and deficits. This is a public policy issue where the Institute could play an important role in formulating and promoting a proposal to achieve the needed legislative clarification. In fact, if our standards are revised along the lines recommended by the task force, it may facilitate the development of such a solution.

Plan Sponsors cannot establish a coherent risk management philosophy without a clear legislative framework. Under the current framework, it is not always clear who benefits from funding surpluses[7], whether due to unexpectedly favourable experience or due simply to the expected "release" of PfADs. This has led to thinner PfADs, lower surpluses and higher deficits.

The lack of clarity in the legislative framework has not been resolved for two main reasons:

- Although legislators might be willing to reinforce in law an explicit "pension deal" between employers and plan members, in most pension plans the "pension deal" has never been clearly articulated.
- Legislators have been wary of the legal and political implications of getting involved with surplus ownership issues (the recent withdrawal of the pension-related portion of Bill 198 in Ontario is the latest example).

However, we may now have reached the point where legislators can be persuaded that the cure (decisive action) is **not** worse than the disease (an unworkable status quo). Although the path to resolution is not clear to the task force, we believe it **is** clear that the Institute should play a key role. As the leading professionals involved in pension plans, actuaries have the most to contribute on these issues (as well as the most to lose if they are not addressed).

That said, we should recognize that achievement of the desired clarification may take a considerable time to achieve. In particular, the tangle of precedents based on trust law that have been created in recent years by judicial decisions may be a formidable obstacle. We do not recommend that the process of improving our professional standards be held up while the process of achieving legislative clarification works its way to completion.

[7] In contrast, it is usually clear who is responsible for funding deficits, whatever the source:

- In most plans, the contributing employer(s) is solely responsible, even when the plan is contributory.
- However, in some contributory plans, a "pension deal" has been articulated and the contributing employer(s) and the active plan members are jointly responsible (e.g., required contribution increases are shared on a 50/50 or other basis).
- In certain plans, particularly union-negotiated and multi-employer plans with fixed employer contribution rates, the plan members are effectively responsible (through the risk of benefit reductions if experience is sufficiently adverse).

Here are some thoughts the task torce suggests for the Institute's consideration as it strives to address the problems with the current legislative framework:

- Released PfADs should be "owned" by those who contributed to their establishment.[8] In the insurer environment, this is analogous to the ownership of participating surplus by participating policyholders and to the ownership of non-participating profits by the insurer's shareholders.
- While most pension plans do not have an explicit "pension deal", an implicit "pension deal" may be inferred from the history of the plan (e.g., Who made up prior funding deficits? How were prior funding surpluses dealt with?).
- Similarly, the pension plan text often contains important indicators of surplus/deficit ownership (e.g., Whose contributions are automatically adjustable depending upon plan experience? Who has control over benefit improvements?).
- Finally, the pension plan trust agreement (if applicable) should also be examined.
- The resultant articulation of the "pension deal" should be based on a balanced assessment of all these considerations, without giving undue weight to any one factor. For example, where the history, plan text or trust agreement is "silent" on an issue, such silence should not be considered to be a decisive factor in the resolution of that issue, but should be balanced by the other considerations.
- The resolution of disputes between the parties to the plan should not be via lengthy and costly litigation. A more expedient, effective and inexpensive approach should be available, if not mandated.
- The parties to the plan should be free to agree at any time to a change in the "pension deal."

[8] This may not always be easy to establish. For example, when a deficit has occurred in the past, the additional contributions to fund it may have had an indirect effect on other elements of employee compensation, implying that employees are indirectly "paying" for at least part of the contributions to fund the deficit.

APPENDIX A

HISTORY OF PROFESSIONAL STANDARDS AND EVOLUTION OF THE PENSION ENVIRONMENT

BACKGROUND

The Canadian Institute of Actuaries first established Standards of Practice for the Valuation of Pension Plans in May 1981. Those standards have since been:

- revised and updated in January 1994;
- supplemented by the "Valuation Technique Paper on Wind-Up and Solvency Valuations of Registered Pension Plans" in July 1998; and
- rendered into the style of the new "Consolidated Standards of Practice, along with some modest updates, in December 2002.

Throughout this brief history, the scope, rationale and approach of the standards have been essentially unchanged. Yet a number of significant and inter-related changes have taken place in the environment in which pension plans operate:

1. Economic and Demographic Factors

- Pension plans have been maturing, with older active employee groups and much larger pensioner groups. This has resulted in higher assets, liabilities and risk levels.
- Greater volatility of investment markets and adoption of "marking to market" of pension assets and obligations (in line with the practice for financial measures generally) has led to greater instability in the financial position, funding requirements and financial accounting impact of pension plans.
- Many pension funds have adopted more aggressive (and therefore riskier) investment policies, e.g., greater exposure to equity investments and less to debt investments.

2. Increased Influence of Regulators and the Accounting Profession

- The development of a separate accounting protocol for pension expense has made "the orderly and rational allocation of contributions among time periods" (SOP 3400.05) a less compelling funding objective.
- Legislated benefits triggered on plan termination can substantially widen the gap between the results of going concern valuations and valuations on a plan-termination basis, and can even result in a deficit when the going concern valuation shows a surplus.
- Maximum benefit limits under tax law have declined dramatically in real terms over the last 30 years, and recently announced increases have done little to redress this. These low limits have led to much greater prevalence of supplementary plans for excess benefits. The funding of supplementary plans is unregulated and is not well addressed in the existing pension practice standards.
- There has been a gradual increase in regulatory specification and restriction of minimum and maximum funding limits.

3. Internal Disagreement and Controversy

- In the period leading up to the adoption of the original standards in 1981, there was an extended and vigorous debate over appropriate pension plan funding (e.g., whether to project employees' future earnings in final average earnings plans). Once the standards were adopted, the debate within the profession died down. However, the last two or three years have seen a renewal of very sharp differences of opinion among pension practitioners on issues related to the appropriate basis for accepted actuarial practice for funding valuations of pension plans.
- The former Council of the Institute commissioned two task forces to make recommendations pertaining to pension plan funding (the Task Force on Pension Plan Funding and the Task Force on Multi-Employer Pension Plans). However, the findings of these two task forces have not gained wide support within the Institute's pension community.
- There have been several high-profile instances recently in the US and the UK where actuaries have been vilified for failures of various kinds in employer-sponsored pension plans. Actuaries in Canada may be at risk for similar treatment unless we address any weaknesses in the standards that govern our pension funding work.